#### On the Move

Local mule deer migration study sheds some light

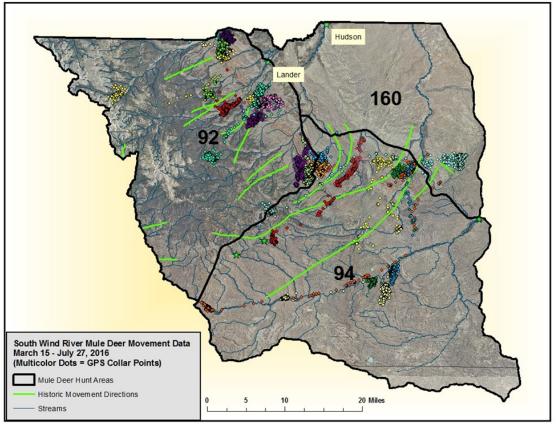


Figure 10. South Wind River movement study area showing colored dots for each collared mule deer and historic movement directions currently used as designated migration routes.

In March, 20 mule deer does were collared on winter ranges throughout the South Wind River herd unit to better understand migrations, seasonal use areas, and key stopover habitats. Locations are recorded by each collar every two hours, and as of August 11 almost 30,000 GPS locations have been received via these satellite transmissions (Figure 10).

Green lines in the figure indicate historical directions of travel designated as migration routes, following a VHF migration study in the 1980s. Movements

from the current study are following similar directions of travel. It appears at least one migration route may exist in the Beaver Rim area, as four migrating mule deer followed the same pathway this spring. Data collected from this study over the next two to three years will hopefully help fine-tune these migration routes.

Of the 17 deer with collars functioning through July, nine (53%) exhibited movements away from the initial capture locations, with movements ranging from about six miles to over 50 miles. The other eight collared deer have generally stayed in close proximity to their late-winter capture location with most of them staying within couple of miles of their capture sites. The majority of the movements have been by deer captured in the Twin Creek and Beaver Creek areas of Hunt Areas 94 and 160, with all six deer captured in those locations moving from 12 to 35 straight line miles

Inside: Aspen Projects pg 3, Golden Trout Fishing pg 4, Education pg 5, Field Reports pg 5, Sage Grouse Lek Reports pg 6



from capture sites to mid-summer locations. One deer actually traveled more than 50 miles in less than a week in her move from the Hall Creek/Beaver Creek area upstream on the Sweetwater River to the South Pass area. Elevations for early-August locations range from about 5,800' to nearly 10,000', while winter-range locations ranged from 5,700' to about 7,300'.

Deer that moved considerable distances often did so very quickly, but once they stopped they have typically remained in close proximity to their destination. Many of the "end" points

have immense numbers of locations in very close proximity to some vegetation feature that would provide hiding cover for giving birth to fawns. However, the vegetation types utilized were quite variable, ranging from open, high density sagebrush draws to tall, riparian willow habitats to lodgepole pine forests.

A few deer showed some level of "stopover" behavior, but spent far less time (typically only a few days) at each stopover compared to deer from prior studies elsewhere in Wyoming. And some merely moved slowly through varied habitats, with only brief rest periods before moving on. Five deer made some level of movement toward higher elevations before turning around to the point of origin, then later moving back again through the first turnaround point to final location beyond. This could have been due to encounters with deep snow.



Pictures above and above left from March mule deer capture and collaring.



Collared doe in the Red Canyon. Photo by Stan Harter.

The multiple types of habitat utilized by all 17 collared deer currently being tracked will be monitored via Rapid Habitat Assessments as soon as possible. These assessments will be used to determine if treatments would be recommended to improve conditions. Alternately, the condition of habitats in some locations may be within desired ecological condition, thus providing examples of what habitats in similar areas should look like following successful treatments and recovery.

## With the Aspens

#### Aspen days



Photo of attendees, taken with a special fish eye camera used in aspen monitoring to capture the extent of aspen canopy cover.

For the past several years, Wyoming Game and Fish Department has hosted Aspen Days, a workshop for land managers, interested citizens, and agency personnel to learn about latest research, on the ground work, and technology in restoring aspen across the West.

This year approximately 40 participants attended the workshop in Lander from July 13-15. The first evening kicked off with a barbeque and presentations from researchers on recent information about managing aspen across large land-scapes.

On the second day local aspen restoration projects near Atlantic City, and U.S.

Forest Service timber management projects along the Loop Road were toured. Discussions included best practices for improving conifer encroached aspen stands, improving hydrological function through aspen restoration, and utilizing aspen stands as natural fire breaks to control the spread of wildfires.

The last day of the workshop took participants to Green Mountain to look at future aspen restoration projects with multiple issues of concern: how to maintain aspen stands that receive multiple levels of browse pressure from large ungulates, including elk, livestock, and free-ranging horses; and monitoring browse, and thresholds beyond which aspen may be unable to recover from excessive use.

#### South Pass aspen project

The aspen restoration project located on South Pass near Atlantic City began its second year of mechanical conifer removal in July. This project is focusing on restoring aspen to benefit mule deer and moose habitat, improve riparian and stream health, and create natural fuel breaks to reduce the risk of wildfire. A contracted crew of sawyers began removing some of the dense conifer encroachment within aspen habitats on July 29. The work is expected to continue through August, with approximately 350 acres of treatment along the Fort Stambaugh Loop Road, near Rock Creek, and along Twin Creek with both Bureau of Land Management and Wyoming State Lands being treated.



Contractor, Summitt Forestry, sent saw crews to mechanically remove encroaching conifer trees from aspen habitats for the benefit of mule deer.

### **Under the Water**

Golden trout, catch 'em while you can!



Thumb Lake golden trout, July 2016.

Attention anglers!

If you don't mind hiking 7 to 12 miles (roundtrip), and possibly even spending a night in the scenic Wind River Mountains, there has never been a better time to fish for golden trout near Lander. Reports received from anglers in June and July indi-

cate that the golden trout fishing in Leg, Thumb, and Windy lakes has been exceptional this summer. Most fish captured this year have been in the 10- to 13-inch range; however, a few golden trout greater than 16 inches were captured too.

All three lakes can be accessed by trailheads located along the Loop Road (Route 300) in the Shoshone National Forest. Leg Lake is in the Roaring Fork Creek drainage and can be accessed using the Stough Creek Lakes trailhead at Worthen Meadows Reservoir. Thumb and Windy lakes can both be accessed from the Christina Lake

trailhead at Fiddlers Lake. Thumb Lake is located in the Silas Creek drainage, and Windy Lake is located in the Atlantic Creek drainage. Golden trout within Leg, Thumb, and Windy lakes are provided by the Wyoming Game and Fish Department through helicopter stocking every two years.

Leg Lake and a golden trout from the Lake, July 2016.

### **About the Education**

Worthen Meadows field day



Fisheries staff and Warden Brady Frude helped out at the annual Worthen field day for Lander Lights On kids. Approximately 100 children participated and they ranged in grades from pre-k to 6th. They spent the day rotating through stations on fishing and knot tying, fish biology and data collection, canoeing, wa-



At left: Fish Supervisor Craig Amadio teaching kids to take fish from gill nets. Above: Canoeing on Worthen Reservoir.

tersheds, invertebrates and marshmallow roasting. A beautiful day in the outdoor was enjoyed by all.

### In the Field

Warden and biologist snippets

- Wardens have been busy during boating season again this year and have been contacting boaters on reservoirs throughout the region. Compliance has been high this year with only a few violations being detected over the busy 4th of July weekend. The most common violation was failing to have enough lifejackets for every passenger on the boat. In some cases no lifejackets were available for passengers at all.
- Wildlife Biologist Greg Anderson and Game Wardens Jessica Beecham and Linnea
   Sailor visited the Copper Mountain Wilderness Study Area on Copper Mountain in
   preparation for a tour related to the Wyoming Public Lands Initiative (WPLI) in Fre mont County. More information on the Initiative can be found here: <a href="http://www.wyo-wcca.org/index.php/initiatives/wpli/">http://www.wyo-wcca.org/index.php/initiatives/wpli/</a>
- Teal Joseph assisted with electrofishing McIntosh Pond #2 in Jeffrey City. Several large bass and rainbow trout were netted during the electrofishing efforts. For more on McIntosh Pond see the June newsletter or visit: <a href="https://goo.gl/N6kLbJ">https://goo.gl/N6kLbJ</a>





#### With the Grouse

Local sage grouse lek numbers



The Wind River/Sweetwater River Local Working Group area's 2016 lek data entry is complete. As of today, the total of 7,223 males observed in 2016 is the 2nd highest total for the Wind River/ Sweetwater River conservation area (only exceeded in 2006). But since 54 more leks were checked this year than in 2006 (we keep finding new leks), this year's average number of males per lek checked was only the 5th best average at 44.9 males/lek - the highest average was 66.8 males/lek in 2006. Hopefully this will be another good year for chick production and survival as well.

# **Around the Region**

Photos from the field..by Stan Harter

